

ON *MITRA MONTEREYI*, A NEW CALIFORNIAN SPECIES.

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Read 9th January, 1920.

THE fine *Mitra* here described is one of several apparently unnamed marine molluscs, the publication of which has been delayed by the pressure of other work.

MITRA MONTEREYI, n.sp.

Diagnosis.—Shell of good size, robust, heavy, spindle-shaped, the maximum width contained in the length somewhat less than three times; whorls only slightly convex on the spire, the latter tapering quite rapidly; sutures distinct but only weakly indented. Aperture ample, its extreme measurement nearly or quite one-half the entire length of the shell; the heavy outer lip suffers moderate thinning at the edge; columellar plaits strong and primarily three, but there is apt to be an incipient fourth one where the columella begins to draw into the canal in front, and a small adventitious plait now and then appears between two of the major ones. Canal short, weakly upturned.

Practically the entire shell sculptured by numerous, rather fine, spiral threads, sometimes more or less obsolete on the peripheral region, and frequently so cut by the lines of growth as to result in an appearance of minute pitting, the spiral threads heaviest and coarsest in the region of the canal and the front of the shell generally. Lines of growth and incremental ridges numerous, varying from fine to coarse and irregular.

Entire shell covered by a strong black or very dark brown periostracum. Interior of shell white or brownish white, the columellar region (except the plaits) and inside of the outer lip frequently deep brown.

Measurements.

	Length	Maximum Width	Length of Body-whorl	Length of Aperture	
Type	66.5	23.5	46.5	33.7	mm.
Paratype	60.0+	22.3	44.5	32.2	"
"	49.6+	19.1	37.0	27.0	"
"	30.5	12.0	23.2	17.0	"

Type.—Cat. No. 298 of the author's collection.

Type Locality.—12 fathoms off Del Monte, Monterey Bay, California; bottom of hard blue clay; S. S. Berry, June, 1906; four specimens.

Remarks.—*Mitra montereyi* is a characteristic member of the *orientalis-idæ* group. The discrepancy between shells of this species and the more southern ones described as *Mitra idæ* by Melvill (1893, p. 140) is very apparent, especially if specimens of the two

forms are brought side by side, when it is shown to lie chiefly in the larger size, far heavier and more robust outline, and relatively longer, more roomy aperture of *montereyi*. Otherwise they are very

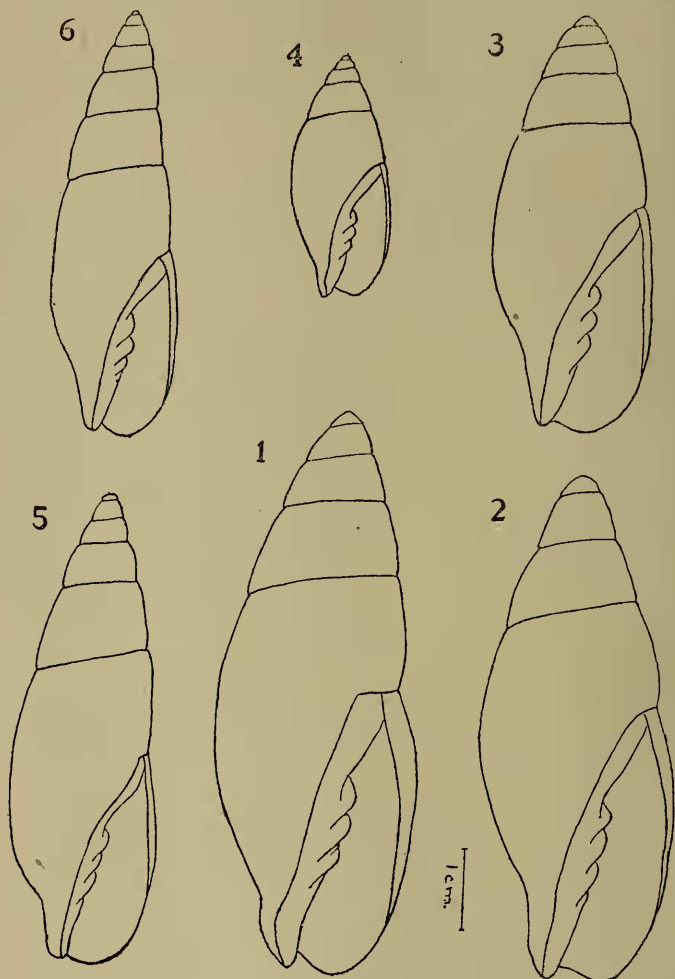


FIG. 1.—*Mitra montereyi*, n.sp., camera outline of type, from Monterey Bay, California; approximately natural size.

FIGS. 2-4.—*Mitra montereyi*, n.sp., camera outlines of three paratypes; same scale as fig. 1.

FIGS. 5-6.—*Mitra idæ*, Melvill, camera outlines of two shells from San Diego, California; same scale as figs. 1-4.

nearly related, so much so that specimens from intermediate localities may conceivably bridge the gap and bring the two forms

into the relationship of sub-species rather than distinct species. This is conjectural, however. Superficially the specimens of *montereyi* much more nearly resemble the published figures of *M. orientalis*, Gray (= *maura*, Swainson) than they do *idæ*, and it was under the name of *maura* that they were originally reported (Berry, 1907, p. 40). The type locality of *maura*, however, is far removed, being Iquique, Chile (Swainson, 1835, p. 193), and hence the range of both *idæ* and *fultoni*, Smith, as well as that of other less nearly allied forms, intervenes.

The type locality of *M. idæ* is given as Point Loma, California. Two San Diego specimens, entered as Cat. No. 202 of the writer's collection, which were probably taken not far from the type locality, are here figured in order better to bring out the differences as compared with *montereyi*. Caliper measurements of the larger of them are: length, 57.1; maximum width, 18.0; length of body-whorl, 37.6; length of aperture, 25.5 mm.

As shown by the figures, the contour of *montereyi* remains remarkably constant through the different stages of growth.

All the specimens seen are more or less eroded at the apex.

Literature cited.

- BERRY, S. S. "Molluscan Fauna of Monterey Bay, California": Nautilus, vol. xxi, June-September, 1907, pp. 17-22, 34-35, 39-47, 51-52.
- MELVILL, J. C. "Description of a new species of *Mitra*": Conchologist, vol. ii, 1893. pp. 140, pl. i, fig. 6.
- SWAINSON, W., in BRODERIP, W. J. "Characters of new genera and species of Mollusca and Conchifera collected by Mr. Cuming": Proc. Zool. Soc. Lond., 1835, pp. 192-198.
- WILLIAMSON, Mrs. M. B. "West American Mitridæ, north of Cape St. Lucas, Lower California": Proc. Biol. Soc. Washington, vol. xix, December, 1906, pp. 193-198, text-figs. 1-7.